Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (canceled)

2. (canceled)

3. (canceled)

4. (canceled)

5. (canceled)

6. (canceled)

7. (canceled)

8. (canceled)

9. (currently amended) A device that determines the phase of a complex number, the device comprising:

circuitry that normalizes the complex number to produce a normalized complex number, the circuitry that normalizes the complex number including circuitry that squares a magnitude of the complex number to produce a squared complex number magnitude, circuitry that inverts the squared complex number magnitude to produce an inverted squared complex number magnitude, circuitry that squares the complex number to obtain a squared complex

number, and circuitry that multiplies the inverted squared complex number magnitude by the squared complex number; and

a closed loop circuit that receives the normalized complex number and produces an output that is proportional to the phase of the complex number.

10. (original) The device of claim 9, wherein the device is contained in an Orthogonal Frequency Division Multiplexing (OFDM) receiver.

11. (previously presented) The device of claim 9, wherein the output that is proportional to the phase of the complex number is twice the phase of the complex number.

12. (original) The device of claim 9, wherein the normalized complex number is presented to the closed loop circuit for a predetermined period of time.

13. (original) The device of claim 12 wherein the predetermined period of time corresponds to a predetermined number of clock cycles.

14. (currently amended) The device of claim 9 wherein the circuitry that normalizes the complex number comprises:

circuitry ~~adapted to invert~~ that inverts the complex number to obtain an inverted complex number;

circuitry ~~adapted to determine~~ that determines a complex conjugate of the inverted complex number; and

circuitry ~~adapted to multiply~~ that multiplies the complex conjugate of the inverted complex number by the complex number.

15. (canceled)

16. (currently amended) An Orthogonal Frequency Division Multiplexing (OFDM) receiver, comprising:

circuitry that receives a transmitted OFDM signal and converts at least a portion of the transmitted OFDM signal into a complex number;

circuitry that normalizes the complex number to produce a normalized complex number, the circuitry that normalizes the complex number including circuitry that squares a magnitude of the complex number to produce a squared complex number magnitude, circuitry that inverts the squared complex number magnitude to produce an inverted squared complex number magnitude, circuitry that squares the complex number to obtain a squared complex number, and circuitry that multiplies the inverted squared complex number magnitude by the squared complex number; and

a closed loop circuit that receives the normalized complex number and produces an output that is proportional to the phase of the complex number.

17. (original) The OFDM receiver of claim 16, wherein the output that is proportional to the phase of the complex number is twice the phase of the complex number.

18. (original) The OFDM receiver of claim 16, wherein the normalized complex number is presented to the closed loop circuit for a predetermined number of clock cycles.

19. (currently amended) The OFDM receiver of claim 16 wherein the circuitry that normalizes the complex number comprises:

circuitry ~~adapted to invert~~ that inverts the complex number to obtain an inverted complex number;

circuitry ~~adapted to determine~~ that determines a complex conjugate of the inverted complex number; and

circuitry ~~adapted to multiply~~ that multiplies the complex conjugate of the inverted complex number by the complex number.

20. (canceled)